# Reserves Management

2015 was a turbulent year for the global financial markets, presenting unprecedented challenges to investment funds. Amid such challenging and difficult investment environment, the Exchange Fund recorded an overall investment return of -0.6% in 2015, but its loss was relatively mild as compared with major market indices and comparable investment funds, thanks to a series of defensive moves deployed by the HKMA over the past years which have enhanced the resilience of the Exchange Fund.

## THE EXCHANGE FUND

The Exchange Fund's primary objective, as laid down in the Exchange Fund Ordinance, is to affect, either directly or indirectly, the exchange value of the currency of Hong Kong. The Fund may also be used to maintain the stability and integrity of Hong Kong's monetary and financial systems to help maintain Hong Kong as an international financial centre. The Exchange Fund is under the control of the Financial Secretary and may be invested in any securities or other assets he considers appropriate, after consulting the Exchange Fund Advisory Committee (EFAC).

#### MANAGEMENT OF THE EXCHANGE FUND

# Investment objectives and portfolio structure

EFAC has set the following investment objectives for the Exchange Fund:

- (a) to preserve capital;
- (b) to ensure that the entire Monetary Base, at all times, will be fully backed by highly liquid US dollardenominated assets;
- (c) to ensure that sufficient liquidity will be available for the purposes of maintaining monetary and financial stability; and
- (d) subject to (a) (c), to achieve an investment return that will help preserve the long-term purchasing power of the Fund.

These objectives take full account of the statutory purposes of the Exchange Fund, and are incorporated into the portfolio structure and the target asset mix of the Fund.

Broadly speaking, the Exchange Fund has two major portfolios — the Backing Portfolio and the Investment Portfolio. The Backing Portfolio holds highly liquid US dollar-denominated assets to provide full backing to the Monetary Base as required under the Currency Board arrangements. The Investment Portfolio is invested primarily in the bond and equity markets of the member countries of the Organisation for Economic Co-operation and Development to preserve the value and long-term purchasing power of the assets. The long-term target bond-to-equity mix for the two portfolios as a whole is 72:28. In terms of target currency mix, 81% of the assets are allocated to the US dollar and the Hong Kong dollar, and the remaining 19% to other currencies.

To better manage risks and enhance returns in the medium and long term, the HKMA has been diversifying part of the Exchange Fund's investment, in a prudent and incremental manner, into a greater variety of asset classes, including emerging market and Mainland bonds and equities, private equity and overseas investment properties. Emerging market and Mainland bonds and equities are held under the Investment Portfolio while private equity and real estate investments are held under the Long-Term Growth Portfolio (LTGP). The cap for the net asset value of the HKMA's investments under the LTGP is maintained at one-third of the Accumulated Surplus of the Exchange Fund. At the end of 2015, the market value of investments under the LTGP totalled HK\$142.1 billion, made up of HK\$91.3 billion in private equity and HK\$50.8 billion in real estate, with outstanding investment commitments amounted to HK\$122.4 billion.

The Strategic Portfolio, established in 2007 to hold shares in Hong Kong Exchanges and Clearing Limited that were acquired by the Government for the account of the Exchange Fund for strategic purposes, is not included in the assessment of the Fund's investment performance because of the unique nature of this Portfolio.

# Reserves Management

#### The investment process

The investment process of the Exchange Fund is underpinned by decisions on two types of asset allocation — the strategic asset allocation and the tactical asset allocation. The strategic asset allocation, reflected in the investment benchmark, represents the long-term optimal asset allocation given the investment objectives of the Exchange Fund. Guided by the strategic allocation, assets are tactically allocated in an attempt to achieve an excess return over the benchmark. This often means the actual allocation is different from the benchmark, or strategic, allocation. The differences between the actual and the benchmark allocations are known as "tactical deviations". While the benchmark and the limits for tactical deviations are determined by the Financial Secretary in consultation with EFAC, tactical decisions are made by the HKMA under delegated authority. Within the limits allowed for tactical deviations, portfolio managers may take positions to take advantage of short-term market movements.

#### **Investment management**

#### Direct investment

HKMA staff in the Reserves Management Department directly manage the investment of about 76% of the Exchange Fund, which includes the entire Backing Portfolio and part of the Investment Portfolio. This part of the Investment Portfolio includes a set of portfolios invested in global fixed-income markets and various derivative overlay portfolios implementing macro risk management strategies for the Fund.

# Use of external managers

In addition to managing assets internally, the HKMA employs external fund managers based in a number of international financial centres to manage about 24% of the Exchange Fund's assets, including all of its listed equity portfolios and other specialised assets. The purpose of appointing external managers is to tap the best investment expertise available in the market to capture a diverse mix of investment styles, and transfer knowledge and information from the market to in-house professionals.

Expenditure relating to the use of external managers includes fund management and custodian fees, transaction costs, and withholding and other taxes. The expenditure is primarily determined by market factors, and may fluctuate from year to year.

## Risk management and compliance

The high volatility of the financial markets in recent years has highlighted the importance of risk management. Stringent controls and investment guidelines have been established for both internally and externally managed portfolios, and compliance with guidelines and regulations is closely monitored. Risk-control tools are deployed to assess market risks under both normal and adverse market conditions. The HKMA also conducts detailed performance attribution analyses to make the best use of the investment skills of both internal and external managers.

## PERFORMANCE OF THE EXCHANGE FUND

#### The financial markets in 2015

The global financial markets were highly volatile in 2015. The equity markets, in particular, encountered exceptional turbulence. Major equity markets reached new highs in the first half of the year. However, market sentiment worsened drastically in the third quarter, arising from Mainland China growth concerns, with major equity markets reversing their year-to-date gains and registering significant quarterly losses. Global equity markets recovered somewhat along with improving market sentiment thereafter, but they worsened again towards the end of the year. With their close linkage with the Mainland economy, Hong Kong equities underperformed other major equity markets in 2015.

On sovereign bond markets, longer-term US Treasury yields rose moderately in 2015 despite expectation of US interest rate normalisation and the start of the US interest rate up-cycle, as positive sentiment was checked by concerns over global economic growth, lingering global disinflationary pressures and intensified geopolitical

tensions. On the other hand, short-term European government bond yields declined and some even slipped into negative territory on the back of the European Central Bank's aggressive monetary easing policy.

On currency markets, the US dollar continued to strengthen in 2015 with the US dollar index surging by almost 10%, amid expectation of the commencement of the US policy rate normalisation. The euro weakened significantly in the first quarter, posting the biggest single-quarter fall in the history of the euro since 1999, as the European Central Bank announced quantitative easing measures in January. On the other hand, the yen stayed largely flat against the US dollar in 2015.

The performance of major currency, bond and equity markets in 2015 is shown in Table 1.

Table 1 2015 market returns	
Currencies	
Appreciation (+)/depreciation (-) against US dollar	
Euro	-10.2%
Yen	-0.3%
Bond markets	
Relevant US Government Bond (1 – 30 years) Index	+0.9%
Equity markets <sup>1</sup>	
Standard & Poor's 500 Index	-0.7%
Hang Seng Index	-7.2%
Market performance on equities is based on index price change during the year.	

# Reserves Management

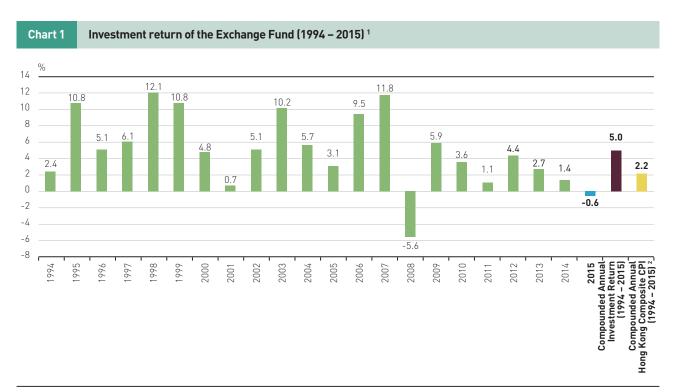
# The Exchange Fund's performance

Against the backdrop of exceptionally volatile financial markets and difficult investment environment, the Exchange Fund recorded an investment loss of HK\$15.8 billion in 2015, comprising gains of HK\$7.1 billion on overseas equities, losses of HK\$5 billion on Hong Kong equities, gains of HK\$15.9 billion on bonds, a negative currency translation effect of HK\$44.9 billion on non-Hong Kong dollar assets and gains of HK\$11.1 billion on other investments held by the investment holding subsidiaries of the Fund. The negative currency translation effect was unavoidable when translating the Exchange Fund's non-US dollar investments into Hong Kong dollar amid the sharp strengthening of the US dollar last year. Separately, the Strategic Portfolio recorded a valuation gain of HK\$2.2 billion.

The total assets of the Exchange Fund reached HK\$3.422.9 billion at the end of 2015. The investment return of the Exchange Fund (excluding the Strategic Portfolio) in 2015 was -0.6%. That notwithstanding, the Exchange Fund's loss could be considered mild when compared with the underperforming major market indices and the investment fund community in general. In anticipation of a worsening investment environment, the HKMA has deployed a series of defensive moves over the past years, which include shortening the duration of bond portfolios, increasing cash holdings, and significantly reducing non-US dollar assets. We have also quickened the pace of investment diversification, especially through investments under the LTGP. These moves have enhanced the resilience of the Exchange Fund and helped mitigate some potential losses.

The annual return of the Fund from 1994 to 2015 is set out in Chart 1. Table 2 shows the 2015 investment return and the average investment returns of the Fund over a number of different time horizons. The average return was 1.2% over the past three years, 1.8% over the past five years, 3.3% over the past 10 years and 5.0% since 1994. Table 3 shows the currency mix of the Fund's assets on 31 December 2015.

Averages over different time horizons are calculated on an annually compounded basis.



<sup>&</sup>lt;sup>1</sup> Investment return calculation excludes the holdings in the Strategic Portfolio.

<sup>&</sup>lt;sup>2</sup> Composite Consumer Price Index is calculated based on the 2009/2010-based series.

Table 2 Investment return of the Exchange Fund in Hong Kong dollar te	erms <sup>1</sup>
	Investment return 2&3
2015	-0.6%
3-year average (2013 – 2015)	1.2%
5-year average (2011 – 2015)	1.8%
10-year average (2006 – 2015)	3.3%
Average since 1994	5.0%

<sup>&</sup>lt;sup>1</sup> The investment returns for 2001 to 2003 are in US dollar terms.

<sup>&</sup>lt;sup>3</sup> Averages over different time horizons are calculated on an annually compounded basis.

Table 3 Currency mix of the Exchange Fund's assets on 31 December 2015 (including forward transactions)		
	HK\$ billion	%
US dollar	2,767.6	80.9
Hong Kong dollar	222.9	6.5
Others <sup>1</sup>	432.4	12.6
Total	3,422.9	100.0

Other currencies included mainly Australian dollar, Canadian dollar, euro, renminbi, pound sterling and Japanese yen.

 $<sup>^{\</sup>rm 2}$   $\,$  Investment return calculation excludes the holdings in the Strategic Portfolio.